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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.                 | CONFIRMATION NO. |
|---|-------------|----------------------|-------------------------------------|------------------|
| 10/060,458  | 01/30/2002  | Fumiaki Arai         | 58122-Z CCD                         | 6616             |
| 7590 10/23/2003   |             |                      |                                     |                  |
| Christopher C. Dunham<br>c/o Cooper & Dunham LLP<br>1185 Ave. of the Americas<br>New York, NY 10036 |             |                      | EXAMINER<br>MICHENER, JENNIFER KOLB |                  |
|   |             |                      | ART UNIT<br>1762                    | PAPER NUMBER     |

DATE MAILED: 10/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |   |                                    |  |
|--|---|------------------------------------|--|
| <p align="center"><b>Office Action Summary</b></p> | <b>Application No.</b><br>10/060,458      | <b>Applicant(s)</b><br>ARAI ET AL. |  |
|  | <b>Examiner</b><br>Jennifer Kolb Michener | <b>Art Unit</b><br>1762            |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 January 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-21 is/are pending in the application.
- 4a) Of the above claim(s) 13, 15 and 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-12, 14, 16-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
       Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
       If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
       a) ☐ All    b) ☐ Some \* c) ☒ None of:  
           1. ☒ Certified copies of the priority documents have been received.  
           2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
           3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
       \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
       a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>0</u> | 6) <input type="checkbox"/> Other:  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse or prejudice of the species of claims 12 and 16 is acknowledged. Claims 13, 15, and 21 have been withdrawn from further consideration pending allowance of a generic claim. The following claims are examined below: 11-12, 14, and 16-20.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) is being considered by the examiner. Examiner notes that the PTO-892 documents from the parent case have been included therein. Examiner has considered the references of these documents, as indicated on the attached PTO-892 Notice of References Cited form. As Applicant has received copies of these references in the office actions from the Examiner of the parent case, additional copies are not provided herein.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 11, 14, 16, 17, 19, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohta (5,843,560).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Ohta teaches a method of producing a thermo-sensitive stencil paper comprising a thermoplastic resin film and a porous resin provided thereon comprising coating the porous resin onto the resin film and drying (abstract). The porous resin layer can contain one or more additives such as a stick-preventing agent and a surfactant (col. 4, lines 16-20) and is applied in a mixture of solvents, one "good" and one "bad", such as for example, tetrahydrofuran (THF) and water (Table 1 in col. 6). Examiner notes that Ohta teaches that silicone, which is an oil, can be used as the stick-preventing lubricant agent. Likewise, THF is an oil. Additionally, surfactants act as emulsifiers. Therefore, the silicone oil and/or THF in the water solvent with an emulsifier, will provide the water-in-oil resin emulsion required by Applicant.

Regarding claims 14 and 16, the porous resin of Ohta may be polyvinyl butyral (Table 1 and Examples).

Regarding claim 17, Ohta teaches that the pores of the porous layer may be 5-30  $\mu\text{m}$ , lying within the range claimed by Applicant (col. 3, line 35), occupying 4-80% of the surface area (col. 3, line 40), using the true round "equivalent diameter" (col. 3, line 48).

Regarding claim 19, the porous layer of Ohta may contain a filler (col. 4, line 17).

Regarding claim 20, the stencil paper of Ohta has a flexural rigidity of 5-200 mN.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 12 and 18 are rejected under 35 U.S.C. 103(a) as being obvious over Ohta.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer

in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2).

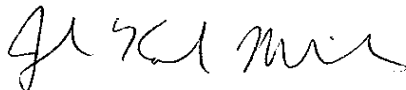
Ohta teaches that which is disclosed above. Additionally, in the first embodiment Ohta teaches that the porous resin is applied in a good solvent and a bad solvent with an emulsifier to dissolve or partially dissolve the resin (col. 4, lines 65-67), but Ohta fails to teach that the non-solvent is added dropwise, with stirring, to a first solution with the good solvent, as required by claim 12. However, Examiner notes that Ohta teaches that the bad solvent influences the pore structure of the porous resin by causing selective precipitation of the resin (col. 5, line 13 and col. 6, line 43). Therefore, it is Examiner's position that selective precipitation would best occur when the resin is already in solution with the good solvent when the second solvent is added second, as is described in the second embodiment. It would have been obvious to one of ordinary skill in the art desiring to cause precipitation and porosity, to place the resin in solution with a better solvent and then add the poor solvent second. Mixing a combination of ingredients prior to coating would have been known to one of ordinary skill in the art desiring to create a uniform composition over the entire coating area. It would have been obvious to one of ordinary skill in the art to appropriately add ingredients and stir them in a manner to optimize results, as set forth above.

Regarding claim 18, Ohta teaches a permeability of  $1.0\text{-}157\text{ cm}^3/\text{cm}^2\cdot\text{sec}$  when perforations are made in the resin to occupy an image area of 20% or more (col. 3, lines 1-25), overlapping the range claimed by Applicant.

Overlapping ranges are *prima facie* evidence of obviousness. It would have been obvious to one having ordinary skill in the art to have selected the portion of Ohta's range that corresponds to the claimed range. *In re Malagari*, 184 USPQ 549 (CCPA 1974).

### **Conclusion**

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Kolb Michener whose telephone number is 703-306-5462. The examiner can normally be reached on Monday through Thursday and alternate Fridays. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P. Beck can be reached on 703-308-2333. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Jennifer Kolb Michener  
Patent Examiner  
Technology Center 1700  
October 19, 2003